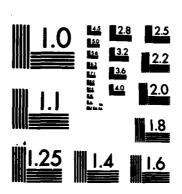
SEA-SEE CHARACTERISTICS AND MISSION APPLICATIONS(U)
NAVAL OCEAN SYSTEMS CENTER SAN DIEGO CA
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**Technical Document 652** 

SEA-SEE
Characteristics and Mission Applications

W. W. Perkins B. C. Parks

> March 1984 Final Report



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### NAVAL OCEAN SYSTEMS CENTER SAN DIEGO, CA 92152

## AN ACTIVITY OF THE NAVAL MATERIAL COMMAND

J.M. PATTON, CAPT, USN

R.M. HILLYER

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Technical Director

### ADMINISTRATIVE INFORMATION

This document was prepared by the Naval Ocean Systems Center, Code 013, San Diego, CA 92152.

The information provided is in response to Public Law 96-480, Sec II, Part (a) — "It is the continuing responsibility of the Federal Government to ensure the full use of the results of the Nation's Federal investment in research and development. To this end the Federal Government shall strive where appropriate to transfer federally owned or originated technology to State and local governments and to the private sector."

Released by
E. P. Cooper, Director for
Science and Technology



### SEA-SEE

# POTENTIAL MISSION APPLICATIONS

# OPERATIONAL CAPABILITIES

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Marine mammal investigation
Shark studies
Kelp bed investigation
Shallow water artificial reef investigation
Acoustic studies
Support for diving operations

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## GENERAL CHARACTERISTICS

# DESCRIPTION

The Sea-See is a catamaran hull type craft outfitted with an underwater observation compartment. The craft is designed for operations in Southern California water. It is capable of fully self-contained support for periods of one week or longer. With the observation compartment extended, the vessel is capable of maintaining 3 knots and serves as an excellent platform for the investigation and research of marine mammals, sharks, and near surface ecology. In addition, the fiberglass hull provides an ideal platform for acoustic studies.

## General

Hull	Catamaran type, styrofoam hull
Length	50 ft
Beam	20 ft
Power	Two GMC 353-N diesel engines
Draft	3.5 ft with observation capsule up; 10 ft with observation capsule down
Speed	7.5 knots with observation capsule up; 3 knots with observation capsule down
Range	300 miles
Electronic Equipment	Sonar Corp. Model 115 marine radiotele- phone
	Raytheon ADF
	Regency-Polaris N72 all marine band ADF
	Raytheon Model D-120m depth indicator, 250-ft maximum
	Raytheon Model 2800 radar
	Motorola 35-watt UHF FM transmitter- receiver
	Motorola 15-watt UFH FM transmitter- receiver portable
	ARC/27 UHF Mil radio 200-300 MHz
	Loran C, M, L 320 Navigator Wood Free- man autopilot

Binaural hydrophone array and system frequency range, flat + 3 dB, 20 Hz to 100 kHz

Lockheed Model 417 instrumentation tape recorder-reproducer, seven-channel direct record-reproduce, frequency response + 3 dB, 200 Hz to 100 kHz at 30 in/sec

Electrical Power . . . . . . . 12-volt and 24-volt DC, 130 amps

Diesel 110-115 volt AC, 60-cycle, 10, Onan 5 kW motor generator

CML Model MRS 500 24-volt DC to 110-115 AC inverter (500 watts)

Four transducer underwater pass-through in observation capsule

13 ft 6 in. Boston Whaler, 20 hp Johnson outboard motor

Zodiac inflatable boat

Instrumentation console

Hyab crane 3300 max lift - 1054 lb, at max. extension 14 ft 9 in.

Programmable gift Model 4000T precision depth recorder

500 watt inverter

Personnel . . . . . . . . . . . . . . . . Four scientists, two crew, observation capsule seats two

Sleeping accommodations are provided for the crew and two scientists with a galley, head for hotel services

Photographic capability, still and motion picture

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